85

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
QUINONES, ISMAEL C	

ART UNIT	PAPER NUMBER
2686	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/995,432	WOLOCHOW ET AL.	
	Examiner	Art Unit	
	Ismael Quiñones	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Applicant's response without Amendment filed on June 20, 2004. **Claims 1-25** are still pending in the present application. **This Action is made NON-FINAL.**

Response to Declaration

2. The declaration filed on June 20, 2004 under 37 CFR 1.131 is sufficient to overcome the Hayduk reference (U.S. P.G.-Pub. No. 2003/0054833) and the Lelievre reference (U.S. P.G.-Pub. No. 2003/0040272).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-11, 14-16, and 18-21** are rejected under 35 U.S.C. 102(e) as being anticipated by Kinnunen et al. (U.S. P.G.-Pub. No. 2001/0018349).

Regarding **claim 1**, Kinnunen et al. disclose an automated service handoff system (An automated service integrated into a cellular communication system which track mobile telephones by a cell identity regarding the current cell in which they are located, therefore such cellular communication system incorporate

"handoff" upholding communications between the cellular communication system and the mobile telephones; *Page 1, Paragraph 3; Fig. 1*), comprising: a service registry including a list of available services (Wherein the communication network comprises a service configuration associated by a service repository which contains the available or actual services; *Page 6, Paragraph 108 Page 7, Paragraph 120; Fig. 2, items 254 and 256*) ; a mobile device associated with a current location (A mobile terminal associated with a particular location; *Page 1, Paragraph 7*), wherein the mobile device includes a list of preferred services (The mobile terminal comprising an LDS client for identifying user preferred services; *Page 4, Paragraph 76; Page 5, Paragraphs 94, 100, and 101*), wherein the mobile device is capable of sending a query including a service location associated with the current location (Receiving service queries from the mobile terminals subsequently obtaining the location information associated with the mobile terminal; *Page 6, Paragraphs 110, 114-116*) and at least one selected member of the list of preferred services to the service registry (Service being selected by the user of the mobile terminal from user pre-set service preferences; *Page 5, Paragraphs 100-102*), and wherein the mobile device is capable of receiving a response to the query from the service registry including at least one selected member of the list of available services (Wherein after receiving a query from the mobile terminal containing a user profile further containing location and service preferences associated with said mobile terminal, the network service configuration identifies those services associated with the user profile and determine which actual or available services matched the user profile; *Page 6,*

Paragraph 109; Page 7, Paragraphs 124-125); and a location determination module capable of determining the current location of the mobile device and capable of being communicatively coupled with the mobile device (A location determination module such as an electronic system or location information sources comprising location techniques such as GPS, and Time of Arrival that can be provided from the mobile terminal, therefore said module being communicatively coupled to the mobile terminal; *Page 1, Paragraph 6; Page 2, Paragraphs 23 and 37; Page 5, Paragraph 95*).

Regarding **claim 2**, and as applied to claim 1, Kinnunen et al. disclose the aforementioned automated service handoff system, wherein the service registry is an extensible markup language-based registry (Wherein the network location server stores location information using extensible markup language (XML); *Page 6, Paragraph 110*).

Regarding **claim 3**, and as applied to claim 1, Kinnunen et al. disclose the aforementioned automated service handoff system, wherein the list of available services includes a service provider (Service Providers that register actual services with the network; *Page 6, Paragraph 108*), a service type (A service characteristic such as service type; *Page 6, Paragraph 109*), and a service location for the at least one selected member of the list of available services (Wherein the actual or available service is provided with location information; *Page 6, Paragraph 110*).

Regarding **claim 4**, and as applied to claim 1, Kinnunen et al. disclose the aforementioned automated service handoff system, wherein the mobile device is

capable of being bound to the at least one selected member of the list of available services (Finding a match between the service preferences associated with the user profile and the actual or available services in the proximity area provided by the network; *Page 6, Paragraph 109; Page 7, Paragraphs 124-127*).

Regarding **claim 5**, and as applied to claim 1, Kinnunen et al. discloses the aforementioned automated service handoff system, wherein the location determination entity is included in the mobile device (A location determination entity such as an electronic system or location information sources comprising location techniques that can be provided from the mobile terminal, therefore said module included in the mobile terminal; *Page 1, Paragraph 6; Page 2, Paragraphs 23 and 37; Page 5, Paragraph 95*).

Regarding **claim 6**, and as applied to claim 5, Kinnunen et al. disclose the aforementioned automated service handoff system, wherein the location determination entity includes a global positioning system receiver (A GPS receiver incorporated into a mobile terminal such as mobile telephone; *Page 1, Paragraph 6*).

Regarding **claim 7**, and as applied to claim 1, Kinnunen disclose the aforementioned automated service handoff system, wherein the mobile device includes a memory in which a plurality of location signatures are stored (The LDS client module installed into the mobile terminal recording sources of location information and assigning an identifier to those sources of location information; *Page 5, Paragraphs 99 and 101*).

Regarding **claim 8**, and as applied to claim 1, Kinnunen disclose the aforementioned automated service handoff system, further comprising: a computer capable of being communicatively coupled with the mobile device and transmitting the list of preferred services to the mobile device (Wherein the mobile terminal service view agent provides the mobile terminal with capability to browse services on the network; *Page 5, Paragraph 101*).

Regarding **claim 9**, and as applied to claim 1, Kinnunen et al. disclose the aforementioned automated service handoff system, further comprising: at least one computer capable of publishing the at least one selected member of the list of available services to the service registry (*Page 5, Paragraph 101*).

Regarding **claim 10**, Kinnunen et al. disclose a mobile device (A mobile terminal; Page 1, Paragraph 10), comprising: a processor module (An LDS client pre-installed in the mobile terminal for determination and selectivity of location dependent services; *Page 5, Paragraph 94*); a local memory communicatively coupled to the processor module and capable of storing a list of preferred services (LDS client comprising a user profile agent for recording characteristics relevant to the provision of services; *Page 5, Paragraph 100*), a current location of the mobile device (A mobile terminal associated with a particular location; *Page 1, Paragraph 7; Page 1, Paragraph 6; Page 2, Paragraphs 23 and 37; Page 5, Paragraph 95*), and a previous location of the mobile device (Means for updating location information; *Page 7, Paragraphs 126-128*); and a communications medium interface communicatively coupled to the processor module and capable of being communicatively coupled to a service registry for sending a query

including a service location associated with the current location of the mobile device (Receiving service queries from the mobile terminals subsequently obtaining the location information associated with the mobile terminal; *Page 6, Paragraphs 110, 114-116*) and at least one selected member of the list of preferred services to the service registry (Service being selected by the user of the mobile terminal from user pre-set service preferences; *Page 5, Paragraphs 100-102*).

Regarding **claim 11**, and as applied to claim 10, Kinnunen et al. disclose the aforementioned mobile device, further comprising: a location determination module capable of determining the current location of the mobile device (A location determination module such as an electronic system or location information sources for determining the current location of the mobile terminal; *Page 1, Paragraph 6; Page 2, Paragraphs 23 and 37; Page 5, Paragraph 95*).

Regarding **claim 14**, Kinnunen et al. disclose a method of automating service handoff operations (An automated service integrated into a cellular communication system which track mobile telephones by a cell identity regarding the current cell in which they are located, therefore such cellular communication system incorporate "handoff" upholding communications between the cellular communication system and the mobile telephones; *Page 1, Paragraph 3; Fig. 1*), comprising: determining a current location of a mobile device (A location determination module such as an electronic system or location information sources comprising location techniques such as GPS, and Time of Arrival for determining a current location of a mobile terminal; *Page 1, Paragraph 6; Page*

2, Paragraphs 23 and 37; Page 5, Paragraph 95); sending a first query including a service location associated with the current location and at least one selected member of a list of preferred services associated with the mobile device to a service registry (Receiving service queries from the mobile terminals subsequently obtaining the location information associated with the mobile terminal; *Page 6, Paragraphs 110, 114-116*); receiving a response to the query from the service registry including at least one selected member of a list of available services maintained by the service registry (Wherein after receiving a query from the mobile terminal containing a user profile further containing location and service preferences associated with said mobile terminal, the network service configuration identifies those services associated with the user profile and determine which actual or available services matched the user profile; *Page 6, Paragraph 109; Page 7, Paragraphs 124-125*); and binding the at least one selected member of the list of available services maintained by the service registry to the mobile device (Finding a match between the service preferences associated with the user profile and the actual or available services in the proximity area provided by the network; *Page 6, Paragraph 109; Page 7, Paragraphs 124-127*).

Regarding **claim 15**, and as applied to claim 14, Kinnunen et al. disclose the aforementioned method, further including: determining that the mobile device has moved to a new current location (The mobile terminal sends location information concerning its new location to the location server; *Page 7, Paragraph 128*); and sending a second query including a service location associated with the new current location (Automatic request for new available service as the mobile

terminal moves into another service deployment area; *Page 7, Paragraphs 126, 128 and 131*) and the at least one selected member of the list of preferred services associated with the mobile device to the service registry (Remote update provided wherein the mobile terminal service view agent updates its view so that the user of the mobile terminal can see the current range of available services; *Page 7, Paragraphs 128 and 131*).

Regarding **claim 16**, and as applied to claim 15, Kinnunen et al. disclose the aforementioned method, wherein determining that the mobile device has moved to a new current location further includes: storing the current location as a previous location (A location determination module such as an electronic system or location information sources comprising location techniques such as GPS, and Time of Arrival for determining a current location of a mobile terminal; *Page 1, Paragraph 6; Page 2, Paragraphs 23 and 37; Page 5, Paragraph 95*); determining the new current location of the mobile device (The mobile terminal sends location information concerning its new location to the location server; *Page 7, Paragraph 128*); and determining that the new current location is not the same as the previous location (Wherein the "service configurator" checks the new current location against the previously stored services and identifies those which are newly available; *Page 7, Paragraphs 126-131*).

Regarding **claim 18**, and as applied to claim 14, Kinnunen et al. disclose the aforementioned method, further including: storing a plurality of location signatures in a memory of the mobile device (The LDS client module installed into the mobile terminal recording sources of location information and assigning

an identifier to those sources of location information; *Page 5, Paragraphs 99 and 101*).

Regarding **claim 19**, and as applied to claim 18, Kinnunen et al. disclose the aforementioned method, further including: determining that the mobile device has moved to a new current location (Wherein the "service configurator" checks the new current location against the previously stored services and identifies those which are newly available; *Page 7, Paragraphs 126-131*); and recalling a selected one of the plurality of location signatures associated with the new current location (Storing network service registrations associated with frequent polling retrieved when moving to a new location; *Page 8, Paragraph 143, Page 9, Paragraph 148*).

Regarding **claim 20**, and as applied to claim 15, Kinnunen disclose the aforementioned method, further including: informing a user of the mobile device that the at least one selected member of the list of preferred services associated with the mobile device is not available for use by the mobile device (When the mobile terminals moves out its current service deployment area the service repository determines that certain services are no longer available; *Page 7, Paragraph 131, Page 8, Paragraphs 141-142*).

Regarding **claim 21**, and as applied to claim 20, Kinnunen et al. disclose the aforementioned method, further including: binding an alternative available service to the mobile device (Registration of a new service as it becomes available once the mobile terminal moves to another service deployment area; *Page 7, Paragraphs 128-131, Page 8, Paragraphs 139-142*).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. **Claims 12 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnunen et al. (U.S. P.G.-Pub. No. 2001/0018349) in view of Chern et al. (U.S. Pat. No. 6,381,465).

Regarding **claims 12 and 17**, and as each applied respectively to claims 10 and 15, Kinnunen et al. disclose the aforementioned mobile device. Kinnunen et al. fail to clearly specify said mobile device comprising: a timer coupled to the processor module for determining a service query update interval (claim 12) and further including: determining that a polling interval time period has ended (claim 17).

In the same field of endeavor, Chern et al. discloses a location monitoring service wherein a mobile device or handset (*Fig. 2, item 130*) periodically sends its location to a server, subsequently performing all services the user is subscribed to such as traffic monitoring and the server sends a notification with information regarding to the subscribed service (*col. 12, line 44 thru col. 13, line 12*) (claim 12); furthermore ceasing, or stopping the periodic updates for service once the handset has reached a destination address or city (*col. 10, lines 18-52*) (claim 17).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Kinnunen et al. mobile device/element to include periodic updated services as taught by Chern et al. for the purpose of providing services as the user dynamically varies its position.

9. **Claims 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnunen et al. (U.S. P.G.-Pub. No. 2001/0018349) in view of Stewart et al. (U.S. Pat. No. 6,414,635).

Regarding **claim 13,** and as applied to claim 10, Kinnunen et al. disclose the aforementioned mobile device. Kinnunen et al. fail to clearly specify said mobile device further comprising: a comparator coupled to the processor module for determining whether a selected number of services are available for binding to the mobile device.

In the same field of endeavor, Stewart discloses a geographic-based communication service wherein a mobile unit selects a respective service and an access point transfers said request to a nearby service provider, if the desired service is not available, alternates services may be suggested according to the preferences of the mobile unit (*col. 24, lines 38-53*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Kinnunen et al. system for providing location dependent services to a mobile terminal to match available location services according to a user's preferences as taught by Stewart et al. for the purpose of intelligently tailor services to user by finding alternative services that appropriately match an specific user preference.

10. **Claims 22-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnunen et al. (U.S. P.G.-Pub. No. 2001/0018349) in view of Purdani et al. (U.S. Pat. No. 6,556,824).

Regarding **claims 22-24**, and as each applied to claim 14; Kinnunen et al. disclose the aforementioned method binding an alternative available service to the mobile device. Kinnunen et al. fail to clearly specify further including: determining that a quality of service associated with the at least one selected member of the list of available services included in the service registry has degraded (claim 22) and retrieving the quality of service associated with the at least one selected member of the list of available services (claim 23) from a service registry associated with the at least one selected member of the list of available services (claims 24).

In the same field of endeavor, Purdani et al. disclose for controlling service degradation performance wherein a service is associated with and indication such as a QoS level parameter, storing said indication and selecting a service associated with a preferred quality level or QoS level parameter from a service registry or fixed network of a radio communication system (*col. 3, line 60 thru col. 4, line 20; col. 6, line 65 thru col. 7, line 8; col. 9, lines 20-40*)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Kinnunen et al. method and system for providing location dependent services to a mobile terminal to quality level parameters associated with a service as taught by Purdani et al. for the purpose ensuring appropriate communication quality levels during service initiation.

11. **Claim 25** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnunen et al. (U.S. P.G.-Pub. No. 2001/0018349) in view of Purdani et al. (U.S. Pat. No. 6,556,824), further in view of Evans et al. (U.S. Pat. No. 6,327,535).

Regarding **claim 25**, and as applied to claim 23, Kinnunen et al. in view of Purdani et al. disclose the aforementioned method for retrieving the quality of service associated with the at least one selected member of the list of available services. Kinnunen et al. in view of Purdani et al. fail to clearly specify retrieving the quality of service from a service provider.

In the same field of endeavor, Evans et al. disclose a context aware method and system wherein service providers have the ability of self-monitoring themselves in order to evaluate a relative quality of information and intelligently conveying information to a location service (*col. 5, lines 29-57*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Kinnunen et al. in view of Purdani et al. method and system for providing location dependent services according to quality level parameters to retrieve quality information from service providers as taught by Evans et al. for the purpose of accurately monitoring the quality of service of a particular service provider.

Response to Arguments

12. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Gershman et al. (U.S. Pat. No. 6,401,085), Mobile Communication and Computing System and Method.

b. Stewart et al. (U.S. Pat. No. 6,452,498), System and Method for Providing Geographic-Based Advertising.

c. Hollenberg et al. (U.S. Pat. No. 6,091,956), Situation Information System.

14. Any response to this Office Action should be faxed to (703) 872-9306 or mailed to:

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Crystal Park II

2021 Crystal Drive

Arlington, VA 22202

Sixth Floor (Receptionist)

15. Any inquiry concerning this communication on earlier communications from the Examiner should be directed to Ismael Quiñones whose telephone number is (703) 305-

8997. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

16. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379, and fax number is (703) 746-9818. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

17. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703) 305-4700 or call customer service at (703) 306-0377.

Ismael Quiñones

I.Q.

November 15, 2004

RAFAEL PEREZ-GUTIERREZ
PATENT EXAMINER
11/15/04